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REMARKS

Present Status of the Application

Applicant appreciates that the Office Action considers claims 17, 19, 20, 30, 32 and 33 to be allowable.

The Office Action rejects claims 1-16, 18, 21-29 and 31 under 35 U.S.C. 103(a) as being unpatentable over Kondo et al. (U.S. Patent 5,781,242, hereinafter Kondo) in view of Andrews et al. (U.S. Patent 5,572,695, hereinafter Andrews). The Office Action also objects claims 10 and 23. Applicant has amended claims 10 and 23. Applicant has also amended independent claims 1, 6, and 21. After entry of the amendments, claims 1-33 remain pending in the present application, and reconsideration of those claims is respectfully requested.

Discussion of Claim Rejections under 35 USC 103

The Office Action rejects claims 1-16, 18, 21-29 and 31 under 35 U.S.C. 103(a) as being unpatentable over Kondo et al. in view of Andrews. Applicant respectfully traverses the rejections for at least the reasons set forth below.

The present invention is directed to the method of buffer management and task scheduling for 2D data transforming, or 2D DCT. The present invention uses two mapping schemes in alternative manner for reading and writing the data, which are transformed in two dimensions.

It should be noted that the mapping schemes are not the mapping table. Actually, when data are written into or read out from the buffer, the transforming data sequence has been set (i.e. page 6, lines 7-10), and automatically guarantees the output sequence required by 2D-DCT

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operation (page 6, lines 16-19).

In other words, the mapping scheme of the present invention is to define the structure of physical address but not the look-up table between the logical address and the physical address. The present invention does not physically include a lookup table in data transformation, such as 2D DCT. One knows that the physical address and the physical address are needed to transformed by a mapping table between the processors and the memory device. However, that mapping table is not the claimed mapping schemes.

In re Kondo, as noted by the Office Action in page 2, Kondo fails to disclose or suggest the two mapping schemes. The Office Action then refers to Andrews.

In re Andrews (Abstract; col. 1, lines 8-18; Fig. 4), Andrews discloses the first and the second mapping means, respectively coupled to the first and the second processors, which can independently access any of a plurality of memory locations within the data storage unit 54. The lookup table section 56 include a buffer (col. 7, lines 47-51).

The lookup table of Andrews is used to map the logical address and the physical address between the processors and the DRAM memory device. The lookup table is not for use to set up the data sequence for 2-dimensional data transforming.

Further more, Andrews intend to independently access the memory device at memory locations. This does not disclose that the two mapping units are alternatively used for data transformation.

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For at least the foregoing reasons, Applicant respectfully submits that independent claims 1, 6, and 21 patently define over the prior art references, and should be allowed. For at least the same reasons, dependent claims 2-5, 7-20, and 22-33 patently define over the prior art references as well, wherein claims 17, 19, 20, 30, 32 and 33 have been considered to be allowable.

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CONCLUSION

For at least the foregoing reasons, it is believed that all the pending claims 1-33 of the invention patently define over the prior art and are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

Respectfully submitted,

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